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TECHNICAL FIELD

[Field of the Invention] This invention relates to a digital camera (what gave the function of a digital camera to a digital still camera, a digital movie camera, and pocket mold information machines and equipment is included), and its motion-control approach.

[0002]

[Background of the Invention] A user can set up image pick-up conditions (record conditions) as a digital camera has advanced features. Image pick-up conditions are covered at varieties, such as for example, image quality mode (compressibility), image size (pixel number), sharpness reinforcement, AWB (automatic white balance) modes (a criterion, daytime, a fluorescent lamp, an incandescent lamp, tungsten lamp, etc.), AE (automatic exposure) modes (a criterion, night view, etc.), color gain (saturation), contrast, stroboscope luminescence mode, stroboscope luminescence reinforcement, and a zoom location. There are many classes of image pick-up conditions to which a user can set the more digital camera of a high-class model.

[0003] If a user can set up image pick-up conditions, whenever it picturizes, the image pick-up condition must be set up. Since it will be eliminated by setting up new image pick-up conditions, even if the image pick-up conditions set up once are the cases where it is going to picturize on the same image pick-up conditions as the image pick-up conditions set up before, they must reset up image pick-up conditions again. Thus, a setup of image pick-up conditions is very troublesome for a user.

[0004]

[Description of the Invention] This invention aims at making it end, even if it does not reset up image pick-up conditions again, when picturizing on the same image pick-up conditions as the image pick-up conditions set up before.

[0005] In the digital camera which records the image data which this invention picturized the photographic subject, was equipped with an image pick-up means to output the image data showing a photographic subject image, and was outputted from the above-mentioned image pick-up means on a record medium With the image pick-up conditioning means and the above-mentioned image pick-up conditioning means of setting up image pick-up conditions With the image pick-up condition storage means and the above-mentioned image pick-up condition storage means of memorizing the set-up image pick-up conditions It is characterized by having an image pick-up condition selection means to choose image pick-up conditions from the image pick-up conditions memorized, and the image pick-up control means which controls the above-mentioned image pick-up means to picturize a photographic subject based on the image pick-up conditions chosen by the above-mentioned image pick-up condition selection means.

[0006] This invention also offers the approach suitable for the above-mentioned camera. Namely, this approach picturizes a photographic subject, have an image pick-up means to output the image data showing a photographic subject image, and the image data outputted from the above-mentioned image pick-up means is set to the digital camera recorded on a record medium. It is characterized by controlling the above-mentioned image pick-up means to set up image pick-up conditions, to memorize the set-up image pick-up conditions, to choose image pick-up conditions from the image pick-up conditions memorized, and to picturize a photographic subject based on the selected image pick-up conditions.

[0007] If image pick-up conditions are set up according to this invention, that set-up image pick-up

condition will be memorized. The image pick-up conditions which a user wants to use are chosen from the image pick-up conditions memorized. Selection of image pick-up conditions controls the above-mentioned image pick-up means to picturize a photographic subject based on the selected image pick-up conditions.

[0008] Since the set-up image pick-up conditions are memorized, desired image pick-up conditions can be set up only by choosing image pick-up conditions using out of the image pick-up condition memorized. The same image pick-up conditions as before can be set up only by choosing image pick-up conditions, without a user resetting up again, even if it is the image pick-up conditions used before.

[0009] It is good to have further a name input means to input the name which identifies the image pick-up conditions set up by the above-mentioned image pick-up conditioning means. In this case, I will relate the image pick-up conditions set up by the above-mentioned image pick-up conditioning means with the name into which it was inputted from the above-mentioned name input means, and the above-mentioned image pick-up condition storage means will memorize them. Moreover, it has further the display which displays the name memorized by the above-mentioned image pick-up condition storage means.

[0010] By inputting the name with which image pick-up conditions are expressed appropriately, by seeing the name shows the contents of the image pick-up conditions. It refers to a name and selection of image pick-up conditions becomes comparatively easy.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the perspective view which looked at the digital still camera from the tooth back.

[Drawing 2] The mode setting dial is shown.

[Drawing 3] It is the block diagram showing the electric configuration of a digital still camera.

[Drawing 4] The Profile table is shown.

[Drawing 5] It is the flow chart which shows the procedure of a digital still camera.

[Drawing 6] It is the flow chart which shows the procedure of a digital still camera.

[Drawing 7] It is the flow chart which shows Profile save actuation.

[Drawing 8] It is the flow chart which shows Profile load actuation.

[Drawing 9] It is an example of the image displayed on the liquid crystal display screen of a digital still camera.

[Drawing 10] It is an example of the image displayed on the liquid crystal display screen of a digital still camera.

[Drawing 11] It is an example of the image displayed on the liquid crystal display screen of a digital still camera.

[Drawing 12] It is an example of the image displayed on the liquid crystal display screen of a digital still camera.

[Description of Notations]

1 Digital Still Camera

3 Mode Setting Dial

5 Electric Power Switch

6 Upper Carbon Button

7 Bottom Carbon Button

8 Left Carbon Button

9 Right Carbon Button

10 Liquid Crystal Display Screen

12 The SAVE Carbon Button

13 The LOAD Carbon Button

20 CPU

21 Image Pick-up Circuit

22 Digital Disposal Circuit

24 Compression/Elongation Circuit

30 Liquid Crystal Display

32 Nonvolatile Memory

40 Memory Card

[Translation done.]

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to a digital camera (what gave the function of a digital camera to a digital still camera, a digital movie camera, and pocket mold information machines and equipment is included), and its motion-control approach.

[0002]

[Background of the Invention] A user can set up image pick-up conditions (record conditions) as a digital camera has advanced features. Image pick-up conditions are covered at varieties, such as for example, image quality mode (compressibility), image size (pixel number), sharpness reinforcement, AWB (automatic white balance) modes (a criterion, daytime, a fluorescent lamp, an incandescent lamp, tungsten lamp, etc.), AE (automatic exposure) modes (a criterion, night view, etc.), color gain (saturation), contrast, stroboscope luminescence mode, stroboscope luminescence reinforcement, and a zoom location. There are many classes of image pick-up conditions to which a user can set the more digital camera of a high-class model.

[0003] If a user can set up image pick-up conditions, whenever it picturizes, the image pick-up condition must be set up. Since it will be eliminated by setting up new image pick-up conditions, even if the image pick-up conditions set up once are the cases where it is going to picturize on the same image pick-up conditions as the image pick-up conditions set up before, they must reset up image pick-up conditions again. Thus, a setup of image pick-up conditions is very troublesome for a user.

[0004]

[Description of the Invention] This invention aims at making it end, even if it does not reset up image pick-up conditions again, when picturizing on the same image pick-up conditions as the image pick-up conditions set up before.

[0005] In the digital camera which records the image data which this invention picturized the photographic subject, was equipped with an image pick-up means to output the image data showing a photographic subject image, and was outputted from the above-mentioned image pick-up means on a record medium. With the image pick-up conditioning means and the above-mentioned image pick-up conditioning means of setting up image pick-up conditions. With the image pick-up condition storage means and the above-mentioned image pick-up condition storage means of memorizing the set-up image pick-up conditions. It is characterized by having an image pick-up condition selection means to choose image pick-up conditions from the image pick-up conditions memorized, and the image pick-up control means which controls the above-mentioned image pick-up means to picturize a photographic subject based on the image pick-up conditions chosen by the above-mentioned image pick-up condition selection means.

[0006] This invention also offers the approach suitable for the above-mentioned camera. Namely, this approach picturizes a photographic subject, have an image pick-up means to output the image data showing a photographic subject image, and the image data outputted from the above-mentioned image pick-up means is set to the digital camera recorded on a record medium. It is characterized by controlling the above-mentioned image pick-up means to set up image pick-up conditions, to memorize the set-up image pick-up conditions, to choose image pick-up conditions from the image pick-up conditions memorized, and to picturize a photographic subject based on the selected image

pick-up conditions.

[0007] If image pick-up conditions are set up according to this invention, that set-up image pick-up condition will be memorized. The image pick-up conditions which a user wants to use are chosen from the image pick-up conditions memorized. Selection of image pick-up conditions controls the above-mentioned image pick-up means to picturize a photographic subject based on the selected image pick-up conditions.

[0008] Since the set-up image pick-up conditions are memorized, desired image pick-up conditions can be set up only by choosing image pick-up conditions using out of the image pick-up condition memorized. The same image pick-up conditions as before can be set up only by choosing image pick-up conditions, without a user resetting up again, even if it is the image pick-up conditions used before.

[0009] It is good to have further a name input means to input the name which identifies the image pick-up conditions set up by the above-mentioned image pick-up conditioning means. In this case, I will relate the image pick-up conditions set up by the above-mentioned image pick-up conditioning means with the name into which it was inputted from the above-mentioned name input means, and the above-mentioned image pick-up condition storage means will memorize them. Moreover, it has further the display which displays the name memorized by the above-mentioned image pick-up condition storage means.

[0010] By inputting the name with which image pick-up conditions are expressed appropriately, by seeing the name shows the contents of the image pick-up conditions. It refers to a name and selection of image pick-up conditions becomes comparatively easy. For example, when two or more users use it, the image pick-up conditions which the user uses can be chosen only by seeing a user name by relating with the name of the user name and memorizing image pick-up conditions.

[0011] When the electric power switch which turns off the power source of a digital camera, and the above-mentioned electric power switch considered as power-source OFF, you may have further a storage control means to make the above-mentioned image pick-up condition storage means memorize the image pick-up conditions set as the digital camera.

[0012] When a power source can make the image pick-up conditions in the condition of having been set to OFF memorize and uses it for a degree, it can picturize according to the image pick-up condition.

[0013] Initial image pick-up conditions may be set as the above-mentioned image pick-up condition storage means.

[0014] For example, image pick-up conditions can be set up only by choosing the initial image pick-up condition, without a user setting up image pick-up conditions by setting up the high image pick-up conditions of operating frequency comparatively as initial image pick-up conditions.

[0015]

[Example] Drawing 1 is the perspective view which shows the example of this invention and looked at the digital still camera 1 from the tooth back.

[0016] On the top face of the digital still camera 1, the shutter release carbon button 2 is formed in right-hand side. Before this shutter release carbon button 2, the mode setting dial 3 is formed free [rotation]. The arrow head 4 is formed in the left-hand side of the mode setting dial 3.

[0017] the tooth back of the digital still camera 1 -- the -- the liquid crystal display screen 10 is mostly formed over the whole surface. A photographic subject image, a playback image, etc. which were picturized on this liquid crystal display screen 10 are displayed. If the mode set up and the mode set up are playback modes, the frame number and image quality (fine , Normal or economy) will be displayed on the upper part of the liquid crystal display screen 10.

[0018] The electric power switch 5 for turning on and turning off the power source of the digital still camera 1 is formed in the upper part of the liquid crystal display screen 10.

[0019] The upper carbon button 6, the bottom carbon button 7, the left carbon button 8, and the right carbon button 9 are formed in the right-hand side of the liquid crystal display screen 10.

Furthermore, the Cancel carbon button 14 for giving the LOAD carbon button 13 for giving the SAVE carbon button 12 for giving the save command of the SET carbon button 11 and an image pick-up parameter and the load command of an image pick-up parameter and a cancellation command is formed in the right-hand side of the liquid crystal display screen 10.

[0020] Drawing 2 shows the mode setting dial 3 and the arrow head 4.

[0021] Each alphabetic character of Online, Cam, Play, and Setup is indicated by the mode setting dial 3.

[0022] Online mode is set up by rotating the mode setting dial 3 so that the alphabetic character of Online may be located in an arrow head 4. The communication link of the digital still camera 1 and a personal computer is attained with Online mode. Cam It is Cam by rotating the mode setting dial 3 so that an alphabetic character may be located in an arrow head 4. The mode is set up. Cam It becomes recordable [the image data which expresses an image pick-up and photographic subject image of a photographic subject with the mode]. By rotating the mode setting diamond 3 so that the alphabetic character of Play may be located in an arrow head 4, image reconstruction becomes possible. Setup It is Setup by rotating the mode setting dial 3 so that an alphabetic character may be located in an arrow head 4. The mode is set up. Setup With the mode, an image pick-up parameter can be set up now so that it may mention later.

[0023] Drawing 3 is the block diagram showing the electric configuration of the digital still camera 1.

[0024] Actuation of the whole digital still camera 1 is generalized by CPU20.

[0025] The digital still camera 1 can set up an image pick-up parameter so that it may mention later, and it can memorize the set-up image pick-up parameter as a Profile table. This Profile table is memorized by nonvolatile memory 32. Moreover, the system memory 31, and the calender/clock 33 which memorizes the program of the digital still camera 1 whole of operation etc. is contained in the digital still camera 1.

[0026] Moreover, the signal which shows a setup (35, such as a switch) of the various carbon buttons mentioned above is inputted into the digital still camera 1 through the I/O (input/output) unit 34. Furthermore, the digital still camera 1 has the function of speed light photography, and the stroboscope control circuit 38 which controls stroboscope luminescence equipment 39 and stroboscope luminescence equipment 39 is included.

[0027] Image pick-up optical system, such as solid-state electronic image sensors, such as CCD, a zoom lens, and a diaphragm, is included in the image pick-up circuit 21. It is Cam by the mode setting dial 4. A photographic subject will be picturized by the image pick-up circuit 21 if the mode is set up. By picturizing a photographic subject, the video signal showing a photographic subject image is outputted from the image pick-up circuit 21. In a digital disposal circuit 22, as for the video signal showing a photographic subject image, signal processing, such as white balance adjustment, sharpness adjustment, saturation adjustment, and contrast adjustment, is performed.

[0028] The video signal outputted from the digital disposal circuit 22 is changed into digital image data in an analog / digital conversion circuit 23. The changed digital image data are again returned to an analog video signal in the digital to analog circuit 29 through a frame memory 27. The signal from OSD (on-screen device)28 is also given to the digital to analog circuit 29.

[0029] Cam obtained by the image pick-up on the liquid crystal display screen 10 as by giving the video signal outputted from the digital to analog circuit 29 to a liquid crystal display 30 showed to drawing 1 The photographic subject image which the alphabetic character in the mode piled up will be displayed.

[0030] The connector 26 is also formed in the digital still camera 1. A personal computer is connectable with this connector 26. By giving the image data showing a photographic subject image to a connector 26 through the communication link interface 25, image data will be transmitted to the personal computer connected to the connector 26.

[0031] Cam When the mode is set up, in compression/elongation circuit 24, the data compression of the image data outputted from the analog / digital conversion circuit 23 when the shutter release carbon button 2 was pushed is carried out. The image data by which the data compression was carried out is recorded on the memory card 40 with which the memory card slot 37 is equipped through card INTAFEISU 36.

[0032] If Play mode is set up by the mode setting dial 4, the compression image data currently recorded on memory card 40 will be read. In compression/elongation circuit 24, data elongation of the read compression image data is carried out. A photographic subject image will be displayed on the display screen 10 by giving the image data by which data elongation was carried out to a liquid

crystal display 30 through a frame memory 27 and the digital to analog circuit 29.

[0033] Drawing 4 is an example of the Profile table memorized by nonvolatile memory 32.

[0034] Profile specified by that Profile number by setting the identifier to the Profile table for every Profile, referring to this identifier, and specifying a Profile number. An image pick-up parameter can be read for every image pick-up conditions. There are image quality (compressibility), resolution, sharpness, AWB mode, AE mode, saturation, contrast, stroboscope mode, stroboscope level, etc. in image pick-up conditions.

[0035] Moreover, the image pick-up parameter of the image pick-up conditions initialized is also memorized by the Profile table. The image pick-up parameter initialized is a parameter with usually high operating frequency, and is specified in the name of DEFAULT (Profile0). The image pick-up parameter initialized does not make a user change. It is Current, when the image pick-up parameter (Current Profile) set up when the power source of the digital still camera 1 was turned off by the Profile table is also memorized and a power source is turned on. The image pick-up parameter of Profile is read.

[0036] Drawing 5 to drawing 8 is a flow chart which shows the procedure of a digital still camera. Drawing 12 shows an example of the image displayed on the liquid crystal display screen 10 from drawing 9.

[0037] Current in the Profile table memorized by nonvolatile memory 32 if the power source of the digital still camera 1 is turned on by the electric power switch 5. The image pick-up parameter of Profile is loaded. The drawing value of the image pick-up circuit 21, the amount of adjustments of white balance adjustment of a digital disposal circuit 22, extent of sharpness, the compressibility of compression/elongation circuit 24, etc. are set up so that it may become the loaded image pick-up parameter (step 51). After purchasing the digital still camera 1, when using it for the first time, in a Profile table, it is Current. Since only the image pick-up parameter which Profile does not have and is specified by Profile0 initialized is memorized, it cannot be overemphasized that each circuit of the digital still camera 1 is set up according to the image pick-up parameter specified by Profile0.

[0038] The mode setting dial 3 is turned by the user and the mode is chosen (step 52).

[0039] A setup of Setup mode displays a Setup image on the liquid crystal display screen 10, as shown in drawing 9 (step 53). In the Setup image immediately after power-source ON, it is Current. The image pick-up parameter of Profile is displayed. Each next field is included in the Setup image.

[0040] Image pick-up condition viewing area 110; it is the field which displays the image pick-up conditions which can be set up by the user. There are image quality, resolution, sharpness, AWB mode, AE mode, etc. Compared with other image pick-up conditions, the light is brightly switched on so that a user may understand being chosen about the image pick-up conditions chosen among each of these photography conditions (in drawing 12, the inverse video is carried out from drawing 9). By pushing the upper carbon button 6 of the digital still camera 1 once, the image pick-up conditions on one of the image pick-up conditions by which current selection is made being chosen, and a next door and the image pick-up conditions on one light up. Moreover, by pushing the bottom carbon button 7 of the digital still camera 1 once, the image pick-up conditions under one of the image pick-up conditions by which current selection is made will be chosen, and the image pick-up conditions under one light up.

[0041] Image pick-up parametric representation field 111; according to image pick-up conditions, the image pick-up parameter which can be set up is displayed corresponding to image pick-up conditions. Current The image pick-up parameter set as Profile is displayed. The image pick-up parameter set up is on, and the established state can be checked. By pushing the left carbon button 8, the image pick-up parameter on the left-hand side of the image pick-up parameter by which current selection is made will be chosen, and the image pick-up parameter on the right-hand side of the image pick-up parameter by which current selection is made will be chosen by pushing the right carbon button 9.

[0042] If an image pick-up parameter is image quality, fine (it is high-definition, and when setting up compressibility low, chosen) one, Normal (it is the thing of standard image quality, and when setting it as the usual compressibility, chosen), or an economy (it is the thing of low image quality, and when setting up compressibility highly, chosen) can be set up. If it is resolution, 960 pixels of 1280 pixel perpendicular directions of horizontal directions, 768 pixels of 1024 pixel perpendicular

directions of horizontal directions, and 480 pixels of 640 pixel perpendicular directions of horizontal directions can be set up. If it is sharpness, it can set up from extent of standard sharpness to plus and minus 1 or 2. If it is in AWB mode, a fluorescent lamp (floor line) etc. can be set up a criterion (STD) and in the daytime (D/L). If it is in AE mode, there are a criterion (STD), an object for night views (Slow sync), etc. If it is contrast, it can set up from extent of standard contrast to plus and minus 1 or 2.

[0043] SAVE command viewing area 112; if the set-up image pick-up parameter may be used, the alphabetic character to which the depression of the SAVE carbon button 12 is urged is displayed.

[0044] LOAD command viewing area 113; when an image pick-up parameter is loaded so that it may mention later, the alphabetic character to which the depression of the LOAD carbon button 13 is urged is displayed.

[0045] If the upper carbon button 6 or the bottom carbon button 7 is pushed as mentioned above (it is YES at step 54), the image pick-up conditions chosen according to the depression will change (step 55). Moreover, a push on the left carbon button 8 or the right carbon button 9 changes the image pick-up parameter chosen according to the depression (step 57). (it is YES at step 56)

[0046] Moreover, as mentioned above, when the SAVE carbon button 12 is pushed (step 58), the set-up image pick-up parameter is saved to a Profile table as new Profile (step 59). (Profile save actuation) It mentions later in detail about this Profile save actuation. As mentioned above, when the LOAD carbon button 13 is pushed (step 60), the image pick-up parameter of selected Profile is loaded from a Profile table (step 61). (Profile load actuation) It mentions later in detail also about this Profile load actuation.

[0047] If the power source of the digital still camera 1 is not turned off by the electric power switch 5 (it is NO at step 62), unless the mode is changed by the mode setting dial 3, processing of steps 53-61 is repeated (step 63).

[0048] If the power source of the digital still camera 1 is turned off by the electric power switch 5 (it is YES at step 62), the image pick-up parameter of the present condition set up is Current Profile. It is overwritten (step 64). Next, when the power source of the digital still camera 1 is turned on, it is automatically set as the condition of the image pick-up parameter set up at the end.

[0049] If the mode in which the set-up mode was changed or (it is YES at step 63) set up is except Setup mode (step 52), it will become processing in the mode changed or set up.

[0050] A setup of Cam mode will perform image pick-up actuation of a photographic subject (step 71). Like Setup mode, a power source is not turned off (it is NO at step 72), and unless a mode change is carried out (it is NO at step 73), image pick-up actuation is continued. The image pick-up parameter by which YES(ing)) a current setup are carried out at the (step 72 is overwritten by Current Profile by turning off a power source (step 64).

[0051] A setup of Play mode performs playback actuation of the image data currently recorded on the memory card 40 with which the digital still camera 1 is loaded (step 74). In Play mode, a power source is not turned off like Setup mode (it is NO at step 75), and unless a mode change is carried out (it is NO at step 76), image pick-up actuation is continued. The image pick-up parameter by which YES(ing)) a current setup are carried out at the (step 75 is overwritten by Current Profile by turning off a power source (step 64).

[0052] A setup of Online mode performs connection actuation with the personal computer connected to the connector 26 of the digital still camera 1 (step 77). In Online mode, a power source is not turned off like Setup mode (it is NO at step 78), and unless a mode change is carried out (it is NO at step 79), image pick-up actuation is continued. The image pick-up parameter by which YES(ing)) a current setup are carried out at the (step 78 is overwritten by Current Profile by turning off a power source (step 64).

[0053] With reference to drawing 7, the procedure (processing of the drawing 5 step 59) of Profile save actuation is explained.

[0054] If the SAVE carbon button 12 is pushed when the Setup image shown in the liquid crystal display screen 10 at drawing 9 is displayed, the Save Profile image shown in drawing 10 will be displayed on the liquid crystal display screen 10 (step 81). The field 121 which displays a Profile number, the field 122 which displays the name of Profile, and the SAVE directions viewing area 112 are contained in the Save Profile image.

[0055] The Profile number chosen is turned on in the Profile number viewing area 121. According to the depression of the upper carbon button 6 (step 82), the Profile number on one of the Profile numbers by which current selection is made will be chosen (step 83), and the Profile number under one of the Profile numbers by which current selection is made will be chosen according to the depression of the bottom carbon button 7 (step 82) (step 83).

[0056] Since the identifier of a proper is displayed on the Profile name viewing area 122 by Profile, Profile in which the image pick-up parameter suitable for an image pick-up in what kind of condition is stored, and Profile in which the image pick-up parameter which which user uses is stored can be known. Profile of the Profile number from which the Profile name viewing area 122 serves as a null (Blank shows drawing 10) shows that the image pick-up parameter is not memorized corresponding to the Profile. The Profile name viewing area 122 can make Profile of the Profile number used as a null memorize the set-up new image pick-up parameter. Of course, it cannot be overemphasized that Profile image pick-up rose meter is already remembered to be may be overwritten.

[0057] A push on the SAVE carbon button 12 displays the image (refer to drawing 11) which inputs the identifier of Profile chosen on the liquid crystal display screen 10 (step 85). (step 84)

[0058] The field and the SAVE directions field 112 which display the Profile name inputted by the user are included in the Profile name input image. When the Profile name input image shown in drawing 11 is displayed on the liquid crystal display screen 10, the alphabetic character of the alphabet is displayed on (step 86) and an alphabetical order by pushing the upper carbon button 6 (step 87). The alphabetic character of the alphabet is displayed on (step 88) and reverse alphabetical order by pushing the bottom carbon button 7 (step 89).

[0059] The alphabetic character of the alphabet currently displayed is decided by pushing the SET carbon button 11. By pushing the right carbon button 9, cursor 132 moves to right-hand side, and the alphabetic character input of the following alphabet of it is attained. The alphabetic character which constitutes the identifier of Profile similarly is decided. By pushing the left carbon button 8, cursor 132 can move to left-hand side, and can change the alphabet in front of one. If all alphabetic characters are inputted, the SAVE carbon button 11 will be pushed (it is YES at step 90), and it will be set to Profile of the image pick-up parameter with which the inputted identifier was set up (step 91). You may make it set up from a personal computer with a keyboard.

[0060] Drawing 8 is a flow chart which shows the procedure (processing of the drawing 5 step 61) of Profile load actuation.

[0061] If the LOAD carbon button 13 is pushed in the Setup image shown in drawing 9, the Load Profile image shown in drawing 12 will be displayed on the liquid crystal display screen 10 (step 101). The Profile number viewing area 141, the Profile name viewing area 142, and the LOAD directions viewing area 113 are contained in the Load Profile image. The number of Profile in which the image pick-up parameter is stored is displayed on the Profile number viewing area 141 of a Load Profile image, and the number of Profile in which the image pick-up parameter is not stored is not displayed on it. The identifier corresponding to the Profile number currently displayed on the Profile number viewing area 141 is displayed on the Profile name viewing area 142.

[0062] The Profile number chosen in (step 102) and the Profile number viewing area 141 is changed into the number of a top or the bottom by pushing the upper carbon button 6 or the bottom carbon button 7 (step 103). A push on the LOAD carbon button 13 loads the image pick-up parameter stored in Profile specified by the Profile number chosen from the Profile table of nonvolatile memory 32 (it is YES at step 104). The image pick-up circuit 21 grade of the digital still camera 1 is set up so that it may become the loaded image pick-up parameter (step 105). After that Cam A photographic subject is picturized by setting up the mode. The image data showing a photographic subject image is recorded on memory card 40 by pushing the shutter release carbon button 2.

[0063] According to the digital still camera 1 of this example, the image pick-up parameter which the user set up can be made to memorize. Only by specifying a Profile number (Profile name), the same image pick-up parameter as the image pick-up parameter set up before can be set up.

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CLAIMS

[Claim(s)]

[Claim 1] In the digital camera which records the image data which picturized the photographic subject, was equipped with an image pick-up means to output the image data showing a photographic subject image, and was outputted from the above-mentioned image pick-up means on a record medium With the image pick-up conditioning means and the above-mentioned image pick-up conditioning means of setting up image pick-up conditions With the image pick-up condition storage means and the above-mentioned image pick-up condition storage means of memorizing the set-up image pick-up conditions The digital camera equipped with an image pick-up condition selection means to choose image pick-up conditions from the image pick-up conditions memorized, and the image pick-up control means which controls the above-mentioned image pick-up means to picturize a photographic subject based on the image pick-up conditions chosen by the above-mentioned image pick-up condition selection means.

[Claim 2] It is the digital camera according to claim 1 had further the indicating equipment display the name which is further equipped with a name input means input the name which identifies the image pick-up conditions set up by the above-mentioned image pick-up conditioning means, relates and memorizes in the above-mentioned image pick-up condition storage means to the name into which the image pick-up conditions set up by the above-mentioned image pick-up conditioning means were inputted from the above-mentioned name input means, and is memorized by the above-mentioned image pick-up condition storage means.

[Claim 3] The digital camera according to claim 1 further equipped with a storage control means to make the above-mentioned image pick-up condition storage means memorize the image pick-up conditions set as the digital camera when the electric power switch which turns off the power source of a digital camera, and the above-mentioned electric power switch considered as power-source OFF.

[Claim 4] The digital camera according to claim 1 with which initial image pick-up conditions are set as the above-mentioned image pick-up condition storage means.

[Claim 5] In the digital camera which records the image data which picturized the photographic subject, was equipped with an image pick-up means to output the image data showing a photographic subject image, and was outputted from the above-mentioned image pick-up means on a record medium The motion-control approach of the digital camera which controls the above-mentioned image pick-up means to set up image pick-up conditions, to memorize the set-up image pick-up conditions, to choose image pick-up conditions from the image pick-up conditions memorized, and to picturize a photographic subject based on the selected image pick-up conditions.

[Translation done.]